

TECHNICAL MEMORANDUM

Utah Coal Regulatory Program

August 17, 2009

TO: Internal File

THRU: Priscilla Burton, Environmental Scientist, III / Team Lead *PWB by SRS*
James D. Smith, En Sci III, Permit Supervisor *JDS 8/17/09*

FROM: Peter H. Hess *PHH by SRS*

RE: RAIL LOADOUT ASPHALT, Canyon Fuel Company, LLC, Skyline Mine, C/007/005, Task ID # 3360

SUMMARY:

The Permittee submitted an application to the Division on August 10, 2009 to upgrade the primary road surfacing material from blast furnace slag / road gravel to asphalt.

Task ID # 3360, as identified within the Division for tracking purposes, consists of the following;

- 1) a line item revision to the bond demolition costs for the removal and disposal of 68 cubic yards of asphalt (3 inch thickness).
- 2) A revised Total Reclamation Cost Estimate to include the updated demolition cost for the asphalt addition
- 3) A revised and updated drainage and permit boundary map, Drawing Number 3.2.1-3, of the Skyline loadout disturbed area

This memo will address the adequacy of the submittal relative to the requirements of R645-301-500, Engineering and R645-301-800, Insurance and Bonding.

TECHNICAL ANALYSIS

OPERATION PLAN

ROAD SYSTEMS AND OTHER TRANSPORTATION FACILITIES

Analysis:

This permit amendment application is a minor revision to the road design for the truck loading loop in the area immediately adjacent to the coal storage silos at Skyline.

Road Classification System

The Skyline Mine primary road loop is classified as a primary road, as determined from the review of Drawing # 3.2.1-1, Loadout Facilities, Drainage and Permit Boundary Map.

Plans and Drawings

This permit amendment involves an upgrade of a primary road surfacing material from gravel to asphalt in the truck loop loading area which circumferences the rail loadout coal storage silos. A paved length of approximately 625 feet with a 12 foot width is to be implemented. A three inch thickness of asphalt is felt to be adequate to support the empty double trailer coal trucks which already utilize this road. These dimensions have been determined from analysis of Drawing # 3.2.1-1, conversation with the Permittee's environmental representative, and the Task ID # 3360 application.

The runoff from this area will report directly to the pond inlet located on the SW side of the sediment pond. The sediment pond is adequately sized to treat the 10 year 24 hour design event (See Volume 5, Section 13, page 1 of 18 of the approved MRP). As part of the Task ID # 3360 review, the third quarter 2009 impoundment inspection report was reviewed. The total volume of this pond at the spillway is 68,700 cubic feet; the required runoff storage volume for the 10 year 24 hour design event is 45,738 cubic feet.

The justification behind this permit amendment is relative to the cost of watering this road during dry conditions, and the transportation of mud from this area onto the truck scale during winter weather conditions. Mud on the truck scale would cause inaccurate truck weight readings.

Performance Standards

The Division has previously determined that this loading area / truck loop road meets the performance standards of the R645 Coal Mining Rules for primary roads.

Primary Road Certification

The improvement of the surfacing material on this short length of primary haul road has no effect on the in-place primary road certification for the Skyline Mine mining and reclamation plan.

Other Transportation Facilities

The Skyline Mine utilizes two coal storage silos with a reclaim mechanism to load unit trains consisting of up to 100 rail cars. This facility, along with numerous upgrades, was permitted many years ago through the Division.

Findings:

The Task ID # 3360 application meets the minimum regulatory requirements of the R645 Coal Mining Rules.

MAPS, PLANS, AND CROSS SECTIONS OF MINING OPERATIONS

Regulatory Reference: 30 CFR Sec. 784.23; R645-301-512, -301-521, -301-542, -301-632, -301-731, -302-323.

Analysis:

Affected Area Maps

Drainage and sediment control is depicted on Drawing # 3.2.1-1. The drainage in the area associated with this application reports directly into the sediment pond.

Mining Facilities Maps

Drawing # 3.2.1-1, Loadout Facilities, Drainage and Permit Boundary is a plan view of the coal storage, conveyance systems, reclaim and train loading facility associated with the Skyline Mine rail loadout facility. The truck loop, which is the area to receive the asphalt paving, is depicted.

Certification Requirements

Drawing # 3.2.1-1, Loadout Facilities, Drainage and Permit Boundary Map is P.E. certified by Mr. Karl Winters, Utah registered professional engineer.

Findings:

This task is a minor revision to the Chapter 5 section of the mining and reclamation plan for the Skyline Mine. Task ID # 3360 meets the minimum regulatory requirements of the R645 Coal Mining Rules.

BONDING AND INSURANCE REQUIREMENTS

Regulatory Reference: 30 CFR Sec. 800; R645-301-800, et seq.

Analysis:

General

The Division holds a bond in the amount of \$ 5,137,000.00 issued by the St. Paul Fire and Marine Insurance Company to ensure the reclamation of the 84.25 acres of disturbance associated with the Skyline Mine facility. This surety has an A.M. Best rating of A+, as of June 30, 2009.

Form of Bond

The bond held by the Division is a surety bond.

Determination of Bond Amount

The Permittee provided, as part of the Task ID # 3360 application, a revised Total Reclamation Cost estimate, along with line item cost estimates for the removal, loading, transportation and disposal of 68 cubic yards (71 tons) of asphalt material, which is the volume estimate provided by the Permittee.

Using a 2009 cost provided by R.S. Means, the Permittee has determined that it will cost \$2,540 to demolish, load, transport and dispose of 116 cubic yards of asphalt material. A disposal fee of 35 dollars per ton was utilized (as determined from East Carbon Development Corporation and City Sanitation, Price, Utah). Asphalt has a weight of 45 pounds / cubic foot. 116 cubic yards equates to 71 tons for disposal = \$2,540.

The demolition cost for removal of all facilities associated with the Skyline Mine has been increased \$ 2,540.

The Permittee has provided a revised reclamation estimate / cost sheet to include the additional \$ 2, 540, which increases the total Direct Costs to \$ 3,757,453.00.

Indirect costs were also re-calculated with an amount of \$ 1,006,997 being determined. Total cost determined to be \$ 4,764,450 (in 2006 dollars).

An escalated cost of \$ 4,952,645.77 was calculated by using an escalation factor of 0.013 (1.013) for a 3 year period = \$ 188,195.00.

Reclamation cost estimated to 2009 dollars = \$ 4, 952, 646.

The posted bond amount as of September 19, 2006 = \$ 5,137,000.

Difference Between Cost Estimate and Bond = \$ 184,000.

Percent Difference = \$ 184,000 / \$ 5,137,000 = 3.58 %

Terms and Conditions for Liability Insurance

The Permittee maintains general liability insurance which meets the requirements of the R645 Coal Mining Rules. This coverage is renewed annually and is verified by DOGM inspection personnel during quarterly inspection. The Permittee continues to meet the requirement of this performance standard.

Findings:

The total reclamation cost is less than the posted bond amount of \$ 5, 137,000. The application meets the minimum requirements of the R645 Coal Mining Rules.

RECOMMENDATION:

Task ID # 3360, which will asphalt pave the truck loading loop adjacent to the coal storage silos at the Skyline Mine should be approved. The Permittee has agreed to correct a calculation error on the TOTAL cost estimate page by providing five clean copies.